MONTHLY WEATHER REVIEW,

MARCH, 1880.

(General Weather Service of the United States.)

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

In preparing this REVIEW the following data, received up to April 14th, have been used, viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at 139 Signal Service stations and 14 Canadian stations, as telegraphed to this office; 140 monthly journals and 158 monthly means from the former, and 12 monthly means from the latter; reports from 27 Sunset stations; 234 monthly registers from Voluntary Observers; 46 monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; monthly reports from Voluntary Observers in, and the local Weather Service of, Missouri; reliable newspaper extracts; special reports.

BAROMETRIC PRESSURE.

Barometric Pressure.—The pressure for the month is remarkable for its equitable distribution from the Mississippi valley eastward to the Atlantic Ocean. As compared with the March averages of the preceding eight years the distribution is decidedly abnormal. From the Missouri valley eastward to the Atlantic an excess of pressure prevailed, averaging 0.05 above the normal and reaching 0.08 above over Lake Ontario. There was a slight deficiency in the pressure of the South Atlantic and Eastern Gulf States. An excess of 0.03 above prevailed at San Diego and San Francisco and of 0.06 above at Portland, Or. The mean at Virginia City was 0.03 below.

Local Barometric Ranges.—The barometric ranges in the Atlantic States regularly increased to the northward, from 0.34 at Key West to 1.09 at Norfolk, 1.18 at New York city and 1.48 at Thatcher's Island, with an extreme range of 1.57 at Burlington, Vt. The range on Mt. Washington, however, was but 0.96, being 0.50 below the average of the surrounding New England stations. A similar increase northward occurs from an average of 0.55 along the Gulf coast to an average of 1.30 in the Ohio valley and Missouri. Unusual ranges occurred in the Lake region and Upper Mississippi valley. The average range for the Lower Lake region is 1.40, the Upper Lake region 1.50 and the Upper Mississippi valley 1.60. Extreme ranges of 1.70 occurred at Milwaukee, Dubuque and La Crosse, of 1.73 at Madison, Wis. and 1.84 at Fort Buford. On the Pacific coast the range regularly increased to the northward from 0.44 at Los Angeles to 1.28 at Olympia and 1.39 at Umatilla. The pressure over the Plateaux and Rocky Mountain districts ranged from 0.45 in the southern part to 0.92 in the northern.

Areas of High Pressure.—During the month twelve areas of high pressure have appeared within the limits of the Signal Service maps. The most notable area is No. II, which remained stationary and without decided change of pressure in the North Pacific coast region from the 5th to the 15th.

No. I.—This area, central in the Ohio valley the morning of the 1st, moved slowly eastward and was central during the 2nd on the Middle Atlantic coast, and by the morning of the 3rd had withdrawn eastward over the Atlantic ocean. The highest pressure during its passage was reported from Cape Henry at midnight, the barometer being 0.48 above the normal. Cautionary Signals were displayed on the morning of the 2nd at Ft. Macon, Cape Lookout and Cape Hatteras. These signals were justified but remained displayed until the morning of the 4th in connection with low area No. I.

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